CLAIMS

1. A method for preparing an isolated extracellular matrix (ECM) secreted by tumor cells of animal origin, including human, characterized in that it comprises the following steps:
a) culturing said tumor cells of animal origin on a support under conditions that allow said tumor cells of animal origin to proliferate and to secrete said ECM; and
b) recovering the ECM thus formed, from which said tumor cells have been removed.

2. The method for preparing an isolated ECM as claimed in claim 1, characterized in that it also comprises, between said step a) and said step b), the following step:
- lysing said tumor cells.

3. The method as claimed in claim 1 or 2, characterized in that said tumor cells of animal origin are epitheliomatous cells.

4. The method as claimed in one of claims 1 to 3, characterized in that said tumor cells are cells of a tumor cell line pre-established from a primary tumor and/or from a metastatic proliferation.

5. The method as claimed in claim 4, characterized in that said tumor cell line has been established from tumor and/or metastatic cells derived from a mammary or ovarian tumor.

6. The method as claimed in one of claims 1 to 5, characterized in that said tumor cells are cells derived from a tumor of human origin.

7. The method as claimed in one of claims 1 to 6, characterized in that said tumor cells are cells derived from the tumor cell line IGR-OV1 as deposited with the CNCM under the number I-2893 on June 20, 2002.

8. An isolated ECM obtained by means of a method as claimed in one of claims 1 to 7.

9. The isolated ECM as claimed in claim 8, secreted by the tumor cell line IGR-OV1 as deposited with the CNCM under the number I-2893 on June 20, 2002.

10. The isolated ECM as claimed in claim 8 or 9, packaged in a fluid, frozen, dried or lyophilized and, where appropriate, sterilized form.

11. A method for culturing tumor cells, characterized in that it comprises a step in which said tumor cells are brought into contact with an isolated ECM as claimed in one of claims 8 to 10, said tumor cells that it is desired to culture being different from those from which said ECM was secreted.

12. A method for preparing a tumor cell line established from tumor cells derived from a sample of a primary and/or metastatic tumor of animal, including human, origin, characterized in that said method implements a step in which the tumor cells contained in said sample of the tumor, and for which it is desired to obtain an established line, are brought into contact with an isolated ECM as claimed in one of claims 8 to 10, said tumor cells for which it is desired to obtain an established line being different from those from which said ECM was secreted.

13. The method as claimed in either of claims 11 and 12, characterized in that the first tumor tissue from which are derived the tumor cells from which said ECM was obtained, and the second tumor tissue containing the tumor cells that it is desired to culture or for which it is desired to establish a cell line, are of the same animal species, including humans.

14. The method as claimed in one of claims 11 to 13, characterized in that said first tumor tissue and said second tumor tissue are of the same embryonic origin.

15. The method as claimed in one of claims 11 to 13, characterized in that said first tumor tissue and said second tumor tissue are of different embryonic origin.

16. The method as claimed in one of claims 11 to 15, characterized in that said first tumor tissue and said second tumor tissue are, independently of one another, of mammary or ovarian type.

17. The method as claimed in one of claims 11 to 16, characterized in that said first tumor tissue is of ovarian type and said second tumor tissue is of mammary or ovarian type.

18. The method as claimed in one of claims 11 to 17, characterized in that said first tumor tissue and said second tumor tissue are of human origin.

19. The use of an isolated ECM as claimed in one of claims 8 to 10, as an element of a culture medium for the cell culture of tumor cells, or for the establishment of a cell line of tumor cells, derived from a primary tumor, said tumor cells

being different from those from which said ECM was secreted.

20. An established tumor cell line obtained by means of a method as claimed in one of claims 12 to 18.

21. The tumor cell line as claimed in claim 20, called IGR-OV-22-AS as deposited with the CNCM under the number I-2894 on June 20, 2002.

22. The tumor cell line as claimed in claim 20, called IGR-BR-11-NS as deposited with the CNCM under the number I-2895 on June 20, 2002.

23. A method for selecting a compound capable of inhibiting the growth and/or the proliferation of tumor cells, characterized in that it comprises the following steps:

a) culturing said tumor cells, this comprising at least one step of culturing on an isolated ECM as claimed in one of claims 8 to 10, said tumor cells being different from those from which said ECM was secreted;

b) bringing said compound into contact with the tumor cells obtained in step a), under conditions that normally allow their growth and/or their proliferation; and

c) selecting said compound if it is capable of inhibiting the growth and/or the proliferation of said tumor cells.

24. The method for selecting a compound as claimed in claim 23, characterized in that said isolated ECM in step a) is the ECM secreted by the tumor cell line IGR-OV1 as deposited with the CNCM under the number I-2893 on June 20, 2002.

25. A method for selecting a compound capable of inhibiting the growth and/or the proliferation of

tumor cells, characterized in that it comprises the following steps:

a) bringing said compound into contact with a cell culture derived from the tumor cell line IGR-OV-22-AS as deposited with the CNCM under the number I-2894 on June 20, 2002, or from the tumor cell line of human origin IGR-BR-11-NS as deposited with the CNCM under the number I-2895 on June 20, 2002; and

b) selecting said compound if it is capable of inhibiting the growth and/or the proliferation of said tumor cells.

26. A method for selecting a compound capable of inhibiting the growth and/or the proliferation of tumor cells from a patient suffering from a tumor, using a sample of tumor cells taken beforehand from said patient, characterized in that it comprises the following steps:

a) establishing a tumor cell line from said tumor cells taken from the patient by means of a method for preparing an established tumor cell line as claimed in one of claims 12 to 18;

b) bringing said compound into contact with a sample of the tumor cell line obtained in step a), under conditions that normally allow its growth and/or its proliferation; and

c) selecting said compound if it is capable of inhibiting the growth and/or the proliferation of the cells of the tumor cell line.

27. A method of diagnosis and of prognosis, *in vitro*, by chromosomal analysis, in particular by cytogenetic and interphase FISH analysis, of tumor cells taken beforehand from a patient, characterized in that it comprises a step in which said tumor cells, taken beforehand, that it is desired to test are cultured on an isolated ECM as claimed in one of claims 8 to 10, said tumor cells

being different from those from which said ECM was secreted.

28. A method of diagnosis or of prognosis, *in vitro*, by cytogenetic analysis of tumor cells taken beforehand from a patient, characterized in that it comprises the following steps:
a) establishing a tumor cell line from said tumor cells by means of a method for preparing an established tumor cell line as claimed in one of claims 12 to 18; and
b) cytogenetic analysis of a sample of cells of said line obtained in step a), under conditions that allow their growth and/or their proliferation.

29. A kit for culturing tumor cells, in particular derived from a mammary or ovarian tumor, or for establishing a cell line derived from said tumor cells, comprising an ECM as claimed in one of claims 8 to 10.

30. A reactor for cell culture containing an isolated ECM as claimed in one of claims 8 to 10.